

Panasonic



42-inch class High Definition Plasma Display

TH-42PH30U

Product specification (design and specification subject to change without notice)

■ DISPLAY

Screen Size (Diagonal)	41.6-inch (1,057 mm)
Aspect Ratio	16:9
Effective Display Area (W x H)	36.2" x 20.4" (921 x 518 mm)
Number of pixels (H x V)	1,024 x 768 pixels (1 pixel=3 cells for R, G and B)
Pixel Pitch (H x V)	0.900 x 0.675 mm
Contrast Ratio	2,000,000:1
Gradation	5,120 steps (equivalent)
Panel Life ¹	approx. 100,000 hours

*1: Guideline operating hours before the panel brightness is reduced to half when the panel is used to display motion pictures in the Standard mode. Afterimages (burned-in images) and malfunctions are not taken into consideration.

■ CONNECTION TERMINAL

VIDEO IN	BNC x 1	1.0 V [p-p] (75 Ω)
AUDIO IN (L/R)	RCA pin jack x 1 set	0.5 V [rms]
COMPONENT/RGB IN	BNC x 3	Y/G : with sync 1.0 V [p-p] (75 Ω) B/P _B /C _B , R/P _R /C _R : 0.7 V [p-p] (75 Ω)
AUDIO IN (L/R)	RCA pin jack x 1 set	0.5 V [rms]
HDMI IN	HDMI TYPE A connector x 1	
DVI-D IN	DVI-D 24pin x 1	Compliance with DVI Revision 1.0 Compatible with HDCP 1.1
AUDIO IN	M3 jack x 1	0.5 V [rms]
PC IN	MINI D-SUB 15pin x1 (Female)	Y/G : with sync 1.0 V [p-p] (75 Ω) without sync 0.7 V [p-p] (75 Ω)
	Plug & Play (VESA DDC 2B)	B/P _B /C _B , R/P _R /C _R : 0.7 V [p-p] (75 Ω)
AUDIO IN	M3 jack x 1	HD/VD : 1.0~5.0 V [p-p] (high impedance)

■ CONTROL TERMINAL

SERIAL	D-SUB 9pin x 1 (EXTERNAL CONTROL TERMINAL), RS-232C COMPATIBLE
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■ ELECTRICAL

Power Requirements	110-127 V AC, 50 Hz/60 Hz
Power Consumption	185 W
On Mode Average Power Consumption ²	150W
Power Off Condition	0.2 W
Stand-by Condition	0.4 W

*2: Based on IEC 62087 Ed.2 measurement method.

■ AUDIO

Audio Output	6Ω, 16 W [8 W + 8 W] (10 % THD)
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■ MECHANICAL

Dimensions (W x H x D)	40.2" x 24.1" x 3.5" (1,020 x 610 x 89 mm)
Carton Dimensions (W x H x D)	44.8" x 28.4" x 11.2" (1,138 x 721 x 284 mm)
Weight	approx. 53.0 lbs. (24.0 kg)
Gross Weight	approx. 63.9 lbs. (29.0 kg)
Cabinet Color	Black

■ ENVIRONMENTAL

Operating Environment	Temperature: 32 °F to 104 °F (0 °C to 40 °C) Humidity : 20 % to 80 % (Non condensation) Altitude : 0 to 9,100 feet (0 to 2,800 m)
Storage Environment	Temperature: -4 °F to 140 °F (-20 °C to 60 °C) Humidity : 20 % to 90 % (Non condensation) Altitude : 0 to 10,800 feet (0 to 3,300 m)

■ STANDARD (CERTIFICATIONS)

SAFETY REGULATIONS	UL60065, CAN/CSA-22.2 No.60065:03, NOM approval
RADIATION REGULATIONS	FCC Part 15 Class-B, ICES-003
Energy star 5.0, CEC	Yes

■ REMOTE CONTROL TRANSMITTER

Power Requirements	DC 3 V (2 x AA Size batteries)
Operation Distance	approx. 23 ft (7 m) in front of plasma display
Weight	approx. 3.5 oz (100 g) including batteries

INCLUDED ACCESSORIES	- AC power cord - Operating instruction book - CD ROM (Operating instructions) - Remote control transmitter - Batteries
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UPC Code	885170 043305
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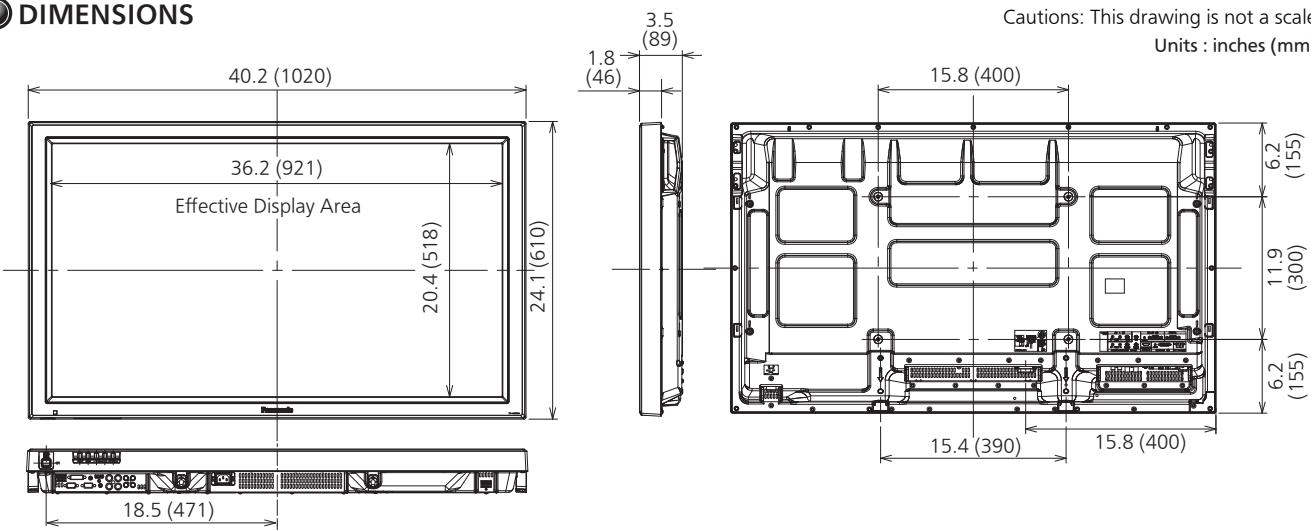
MAIN FEATURE

Digital Zoom	Yes
Video Wall	Yes (N x M, up to 5 x 5)
Power-On Delay	Yes
Display size setting	Yes
Auto Set Up	Yes
HDMI Range	Yes
Screen Saver	Negative image, Scrolling bar only, White screen, Overlay scrolling bar
NANO DRIFT Saver	Yes (LOW/MID/HIGH)
Side Bar Adjust	Yes
Peak Limit	Yes
Power Save	Yes
Power Management (PC/DVI)	Yes
No Signal Power Off	Yes
Initial INPUT	Yes
Initial VOL level	Yes
INPUT/Button Lock	Yes
Remote-control User Level	Yes
Maximum VOL level	Yes

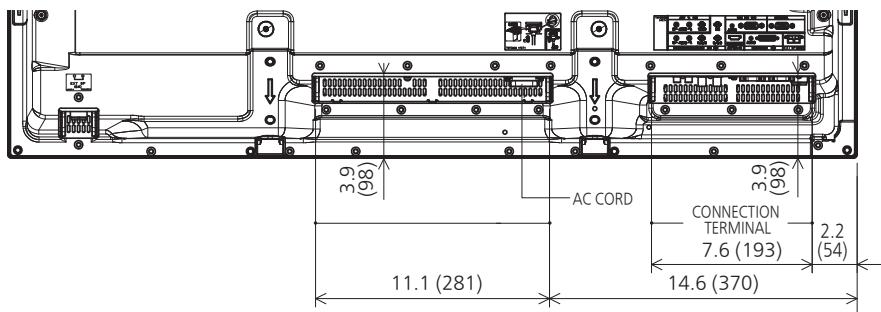
OPTIONAL ACCESSORIES

Pedestal	TY-ST20-K
Mobile stand	TY-ST58PF20
Wall-hanging bracket	TY-WK42PV20
Wall-hanging bracket (angled)	TY-WK42PR20
Ceiling-hanging bracket	TY-CE42PS20
Speakers	TY-SP42P8W-K
Touch Panel	TY-TP42P10S
Anti Glare Filter	TY-AR42P12W

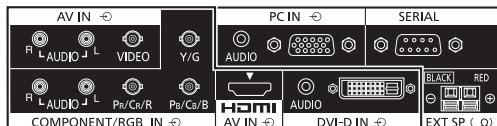
DIMENSIONS



TERMINAL DIMENSIONS



CONNECTION TERMINAL



● Preset Input Signals

	Signal name	horizontal frequency (Hz)	vertical frequency (Hz)	Component Video	Composite Video	HDMI	DVI-D	PC IN (D-sub 15-pin)
Composite	NTSC	15.73	59.94	Y				
	PAL	15.63	50.00	Y				
	PAL60	15.73	59.94	Y				
	SECAM	15.63	50.00	Y				
	Modified NTSC	15.73	59.94	Y				
Component/RGB	525(480)/60i	15.73	59.94	Y		Y	Y	Y
	525(480)/60p	31.47	59.94	Y		Y	Y	Y*1
	625(575)/50i	15.63	50.00	Y				Y
	625(575)/50p	31.25	50.00	Y		Y	Y	
	625(576)/50p	31.25	50.00			Y	Y	
	750(720)/60p	45.00	60.00	Y		Y	Y	Y
	750(720)/50p	37.50	50.00	Y		Y	Y	Y
	1125(1080)/60i	33.75	60.00	Y*2		Y	Y	Y*2
	1125(1080)/60p	67.50	60.00	Y*2		Y	Y	Y*2
	1125(1080)/50i	28.13	50.00	Y*2		Y	Y	Y*2
	1125(1080)/50p	56.25	50.00	Y*2		Y	Y	Y*2
	1125(1080)/30p	33.75	30.00	Y*2			Y	Y*2
	1125(1080)/25p	28.13	25.00	Y*2			Y	Y*2
	1125(1080)/24p	27.00	24.00	Y*2		Y	Y	Y*2
	1125(1080)/24sF	27.00	48.00	Y*3				Y*3
	RGB	640×400@70Hz	31.46	70.07	Y			
640×480@60Hz		31.47	59.94	Y*5		Y	Y	
640×480@72Hz		37.86	72.81	Y				Y
640×480@75Hz		37.50	75.00	Y				Y
640×480@85Hz		43.27	85.01	Y				Y
800×600@56Hz		35.16	56.25	Y				Y
800×600@60Hz		37.88	60.32	Y		Y	Y	Y
800×600@72Hz		48.08	72.19	Y				Y
800×600@75Hz		46.88	75.00	Y				Y
800×600@85Hz		53.67	85.06	Y				Y
852×480@60Hz		31.47	59.94	Y*5		Y	Y	Y
1024×768@50Hz		39.55	50.00			Y	Y	
1024×768@60Hz		48.36	60.00	Y		Y	Y	Y
1024×768@70Hz		56.48	70.07	Y				Y
1024×768@75Hz		60.02	75.03	Y				Y
1024×768@85Hz		68.68	85.00	Y				Y
1066×600@60Hz		37.64	59.94	Y		Y	Y	Y
1152×864@60Hz		53.70	60.00			Y	Y	
1152×864@75Hz		67.50	75.00	Y				Y
1280×768@60Hz		47.70	60.00	Y				Y
1280×960@60Hz		60.00	60.00	Y				Y
1280×960@85Hz		85.94	85.00	Y				Y
1280×1024@60Hz		63.98	60.02	Y		Y	Y	Y
1280×1024@75Hz		79.98	75.03	Y				Y
1280×1024@85Hz		91.15	85.02	Y				Y
1366×768@50Hz		39.55	50.00			Y	Y	
1366×768@60Hz		48.36	60.00	Y		Y	Y	Y
1400×1050@60Hz		65.22	60.00			Y	Y	
1600×1200@60Hz	75.00	60.00	Y		Y	Y	Y	
1600×1200@65Hz	81.25	65.00	Y				Y	
1920×1080@60Hz	67.50	60.00	Y*6		Y*6	Y*6	Y*6	
1920×1200@60Hz	74.04	59.95			Y	Y		
Mac13" (640×480)	35.00	66.67	Y				Y	
Mac16" (832×624)	49.72	74.54	Y				Y	
Mac21" (1152×870)	68.68	75.06	Y				Y	

● Pin assignments and signal names

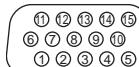
Serial RS232C : D-sub 9-Pin (Male)



No.	Details
1	NC
2	RXD
3	TXD
4	Not used
5	GND
6	Not used
7	Shorted in this set
8	Shorted in this set
9	NC

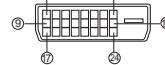
*These signal names are those of computer specifications.

PC Input : D-Sub 15-Pin (Female)



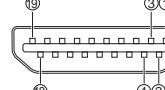
No.	Signal name
1	R (P _R /C _R)
2	G (Y)
3	B (P _B /C _B)
4	NC (Not connected)
5	GND (Ground)
6	GND (Ground)
7	GND (Ground)
8	GND (Ground)
9	+5V DC
10	GND (Ground)
11	NC (Not connected)
12	SDA
13	HD/SYNC
14	VD
15	SCL

DVI-D Input Terminal



No.	Signal name	No.	Signal name
1	T.M.D.S. data 2-	13	—
2	T.M.D.S. data 2+	14	+5 V DC
3	T.M.D.S. data 2 shield	15	Ground
4	—	16	Hot plug detect
5	—	17	T.M.D.S. data 0-
6	DDC clock	18	T.M.D.S. data 0+
7	DDC data	19	T.M.D.S. data 0 shield
8	—	20	—
9	T.M.D.S. data 1-	21	—
10	T.M.D.S. data 1+	22	T.M.D.S. clock shield
11	T.M.D.S. data 1 shield	23	T.M.D.S. clock+
12	—	24	T.M.D.S. clock-

HDMI Terminal



No.	Signal	No.	Signal
1	T.M.D.S. data 2+	11	T.M.D.S. clock shield
2	T.M.D.S. data 2 shield	12	T.M.D.S. clock-
3	T.M.D.S. data 2-	13	CEC
4	T.M.D.S. data 1+	14	Reserved (N.C. on device)
5	T.M.D.S. data 1 shield	15	SCL
6	T.M.D.S. data 1-	16	SDA
7	T.M.D.S. data 0+	17	DDC/CEC Ground
8	T.M.D.S. data 0 shield	18	+5V Power
9	T.M.D.S. data 0-	19	Hot Plug Detect

*1:When selected the RGB format and 525p signal input, it is recognized as VGA 60Hz signal. *2:Based on SMPTE 274M standard. *3:Based on SMPTE RP211 standard.

*4:Based on SMPTE 295M standard. *5:When inputted VGA 60 Hz format signal, it is recognized as 525p signal. *6:Recognized as 1,125(1,080)/60p signal.

Note: Signals without above specification may not be displayed properly.